Electro-Magnetic Compatibility (EMC)
This product complies with Council Directive 2004/108/EC when installed and used in accordance with the relevant instructions.

Service and Technical Support
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User Guide

ICP 300
In-Cab Printer

Operation

Contents

Introduction ____ *3*
Parts List ____ *3*
Setup ____ *4*
Operation ____ *5*
Power-On Self-Test ____ *5*
Status LED ____ *5*
Replacing the paper roll ____ *6*
Maintenance ____ *7*
Service ____ *7*
Specifications ____ *8*

Introduction

Figure 1

The RDS ICP 300 In-Cab printer is an ultra-compact thermal printer designed for easy paper loading. It accepts 58mm wide rolls up to 44mm dia. The printer is connected to and powered from the instrument via a single cable with RJ-12 connector, and operates with a supply voltage in the range 10-35V dc. No maintenance is required except to occasionally clean the rubber paper roller to remove any dirt buildup.

Parts List

Part No	Description	Qty
S/HU/167-4-001	ICP 300 Printer	1
S/BK/167-4-015	Mounting Plate	1
S/CB/167-4-005 or:	Printer Cable for Wizard	1
S/CB/167-4-006	Printer Cable for Pro-Series/PSi	
S/F701-050	M3X 8 Screw	2
S/F713-001	M3 Washer	2
S/FSNR/940117	M6 x 16 Hex Set Screw	2
S/FSNR/406	M6 Nut	2
S/FSNR/940205	M6 Washer	2
S/CBL/TIE/001	Cable Tie	25
S/AC/167-3-030	Paper Roll	2

Setup

Plug the printer cable RJ-12 connector into the back of the printer and then attach the mounting plate with the two M3 screws provided.

The cable is connected normally to the upper port on a 'Pro-Series'/'Psi' head unit, or into the 'Terminator' junction box of a 'Wizard' instrument (fig. 2).

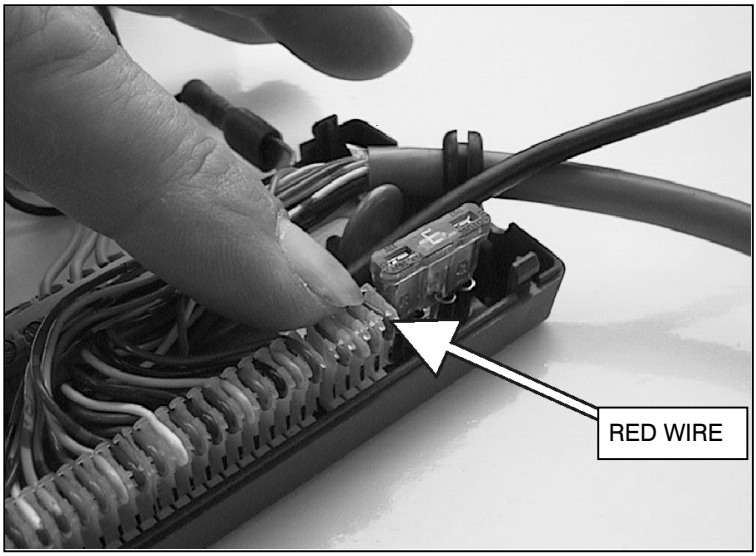

Figure 2 Connecting to a Wizard Head Unit

Connect the lead Pt No. S/CB/167-4-005 onto the 4-way connector in the terminal box as shown.

Locate the cable grommet onto the moulding, and cable-tie the head unit lead onto the moulded cable saddle to provide strain relief.

Operation

When installed with a Wizard instrument the printer is normally powered on as the vehicle is started.

When installed with a Pro-Series/Psi instrument the printer is powered on when the instrument is switched on.

The status LED illuminates and the printer mechanism is reset.

Pressing the button advances the paper.

Power-On Self-Test

Press and hold the button and then power up the instrument. The printer will then print a self-test report.

The self-test procedure checks most of the printer functions except for the serial interface

Status LED

If there is a problem with the printer, the status LED will indicate a fault condition by a flashing sequence as follows.

LED Indication	Condition	Solution
On	Normal	-
Off	No Power	-
* * *	Paper Out	Fit new paper
** ** **	Print head too hot	Allow head to cool
*** *** ***	Power below 10V dc	Check supply +V

Replacing the paper roll

Pull the lever up until the lid is released. Do not use excessive force.

Figure 3: Unlock paper compartment

Replace the roll and press the lid at each side until it clicks shut.

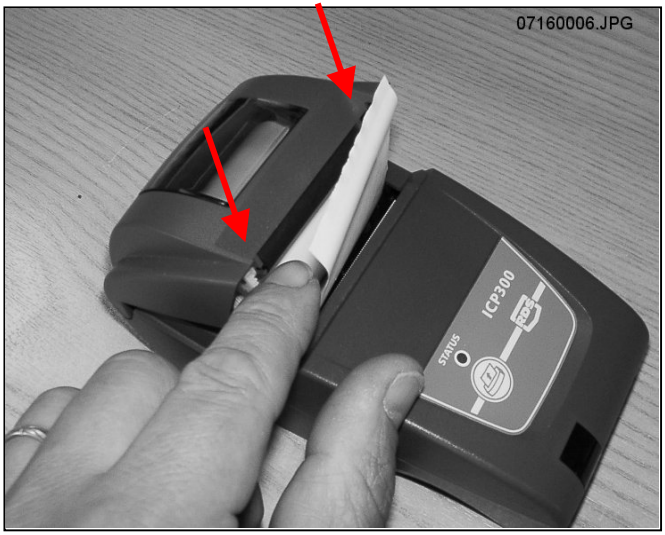

Figure 4: Lock paper compartment

Maintenance

Occasionally, it may be necessary to clean dust or foreign matter from the paper compartment. Wipe the paper compartment clean using a dry soft cloth only.

The rubber roller can be removed for cleaning if necessary. Push the roller forwards at each end to disengage it from the slots (figure 5).

NOTE: DO NOT angle the roller too far with one end still engaged as this may break the moulding.

DO NOT touch or attempt to clean the print head.

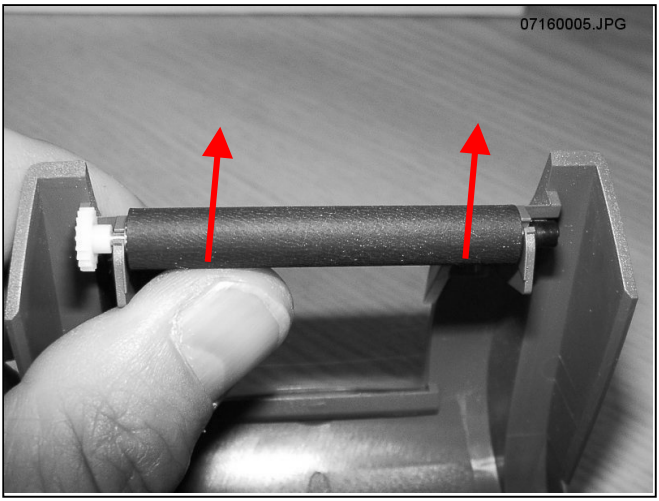

Figure 5: Remove paper roller

Service

There are no servicable parts. In the event of damage or failure, the printer is replaceable only as a complete unit.

Specifications

Printing

Printing System	Direct Thermal line head
Characters per line	48
Character matrix	24 x 8
Horizontal dot pitch	0.125mm (200 dpi)
Vertical Dot pitch	0.125mm
Printing width	48mm
Max. print speed	10 lines per second
MTBF	Approx. 10^7 lines (20°C, print ratio 25%)

Power

Voltage	External 10 – 35 V dc
Operating Current	From 1A @ 35V to 2.7A @ 10V
Standby	30 mA

Paper

Paper roll	58mm x 44mm dia
Paper specification	TF50-KS-E2D (recommended)

I/O

Interface	RS232C
Connector	6-way RJ-12 socket
Baud rate	4800
Parity	None
Data Bits	8
Stop Bits	1
Handshake	Hardware (CTS)
Buffer	5 Kbyte
Character set	ASCII

Environmental

Operating	0°C to +50°C
Storage	-20°C to +60°C
Dimensions	85.5mm x 150mm x 55mm (excluding bracket)
Weight	0.4 kg (excluding bracket)

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